

IN THE SPECIFICATION

Please enter amended paragraph [0018] in the specification as follows.

B1
[0018] Figure 1 illustrates a general schematic of a possible prior art fuel cell system including a thermal management system.

IN THE CLAIMS

Please enter additional claims 22-35 as follows.

*sub
c1
cont.*
22. The article of manufacture of claim 21 wherein the at least one noise silencer is a Helmholtz resonator.

B2
23. The article of manufacture of claim 21 wherein the at least one noise silencer is a broadband silencer.

24. The article of manufacture of claim 21 wherein the at least one noise silencer is a narrowband silencer.

25. The system of claim 21 wherein the at least one noise silencer comprises a plurality of noise silencers for both narrowband and broadband application.

26. The system of claim 14 wherein the at least one noise silencer is a Helmholtz resonator.

27. The system of claim 14 wherein the at least one noise silencer is a broadband silencer.

28. The system of claim 14 wherein the at least one noise silencer is a narrowband silencer.

29. The system of claim 14 wherein the at least one noise silencer comprises a plurality of noise silencers for both narrowband and broadband application.

30. The system of claim 17 wherein the at least one noise silencer is a Helmholtz resonator.

31. The system of claim 17 wherein the at least one noise silencer is a broadband silencer.

32. The system of claim 17 wherein the at least one noise silencer is a narrowband silencer.

33. The system of claim 17 wherein the at least one noise silencer comprises a plurality of noise silencers for both narrowband and broadband application.

34. An apparatus for reducing noise from an air-moving device, comprising:

a shroud having an inner surface disposed around an area defining an airflow;

at least one generally cylindrical outer barrel connected to the shroud, the outer barrel having an inner and outer surface extending from the shroud inner surface further defining the airflow;

at least one noise silencer comprising at least one hollow cavity tuned to attenuate predetermined noise frequency ranges within the airflow, the noise silencer connected to the airflow by at least one opening of a predetermined size through the outer barrel; and

at least one pipe extending radially between the opening through the outer barrel and the hollow cavity.

35. An apparatus for reducing noise from an air-moving device, comprising:

a shroud having an inner surface disposed around an area defining an airflow;

at least one outer barrel connected to the shroud, the outer barrel having an inner and outer surface extending from the shroud inner surface further defining the airflow;

at least one noise silencer comprising at least one hollow cavity tuned to attenuate predetermined noise frequency ranges within the airflow, the noise silencer connected to the airflow by at least one opening of a predetermined size through the outer barrel; and

at least one pipe disposed between the opening through the outer barrel and the hollow cavity and extending generally parallel to the airflow.

Please enter amended claims 1-15, 17, 18, 20 and 21 as follows.

- SUB
C-1
cont.*
- B3*
1. A system for noise reduction from an air-moving device, comprising:
 - a shroud having an inner surface disposed around an area defining an airflow;
 - at least one outer barrel connected to the shroud, the outer barrel having an inner and outer surface extending from the shroud inner surface further defining the airflow;
 - at least one inner noise silencer disposed in the airflow; and
 - at least one outer noise silencer comprising at least one hollow cavity tuned to attenuate predetermined noise frequency ranges within the airflow, the at least one outer noise silencer connected to the airflow by at least one opening of a predetermined size through the outer barrel.
 2. The system of claim 1 wherein the at least one outer noise silencer is attached to the outer barrel outer surface.
 3. The system of claim 1 wherein the at least one outer noise silencer is attached to the shroud.
 4. The system of claim 1 further comprising stator members attached on the outer barrel inner surface.
 5. The system of claim 1 wherein the at least one outer barrel extends downstream of the air-moving device.

6. The system of claim 1 wherein the at least one outer barrel extends upstream of the air-moving device.

7. The system of claim 1 wherein the at least one outer barrel extends both upstream and downstream of the air-moving device.

8. The system of claim 1 wherein the at least one outer noise silencer is a Helmholtz resonator.

9. The system of claim 1 wherein the at least one outer noise silencer is a broadband silencer.

10. The system of claim 1 wherein the at least one outer noise silencer is a narrowband silencer.

11. The system of claim 1 wherein said at least one outer noise silencer comprises a plurality of noise silencers for both narrowband and broadband application.

12. The system of claim 1 wherein said at least one outer noise silencer comprises a plurality of noise silencers arranged in a parallel configuration.

13. The system of claim 1 wherein said at least one outer noise silencer comprises a plurality of noise silencers arranged in a series configuration.

14. A system for noise reduction from a plurality of axial flow fans, comprising:

a shroud having an inner surface;

a plurality of outer barrels accommodating the plurality of axial flow fans, respectively, and connected to the shroud, the outer barrels each having an inner and outer surface extending from the shroud inner surface and further defining a corresponding airflow; and

at least one noise silencer comprising at least one hollow cavity tuned to attenuate predetermined noise frequency ranges within the corresponding airflow, the at least one noise silencer connected to the corresponding airflow by at least one opening of a predetermined size through a corresponding one of the plurality of outer barrels.

15. The system of claim 1 wherein the cavity further comprises a sound absorbing material.

17. A system for noise reduction from an air-moving device, comprising:

a shroud having an inner surface disposed around an area defining an airflow;

at least one outer barrel connected to the shroud, the outer barrel having an inner and outer surface extending from the shroud inner surface further defining the airflow;

an inner barrel with at least one noise silencer attached to the air-moving device;

and

at least one outer noise silencer comprising at least one hollow cavity tuned to attenuate predetermined noise frequency ranges within the airflow, the at least one outer noise silencer each connected to the airflow by at least one opening of a predetermined size through the outer barrel.

18. The system of claim 1 wherein the at least one outer noise silencer further comprises at least one pipe disposed between the opening through the outer barrel and the hollow cavity.

20. The method of claim 19 further comprising the step of redirecting the airflow using stator members.

21. An apparatus for reducing noise from an air-moving device, comprising:

- a shroud having an inner surface disposed around an area defining an airflow;
- at least one outer barrel connected to the shroud, the outer barrel having an inner and outer surface extending from the shroud inner surface further defining the airflow;
- at least one noise silencer comprising at least one hollow cavity tuned to attenuate predetermined noise frequency ranges within the airflow, the noise silencer connected to the airflow by at least one opening of a predetermined size through the outer barrel; and
- at least one generally spiral pipe disposed between the opening through the outer barrel and the hollow cavity.